

EXHIBIT 49

Case 5:14-cv-05344-BLF Document 381-49 Filed 07/14/16 Page 2 of 6

AMENDED APPENDIX H.EC - Edge-Core Usage of Disputed CLI Commands

| Disputed Cisco Command | Edge-Core Command Syntax | Edge-Core Manual Bates Number |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| aaa accounting | aaa accounting commands level {default method-name} start-stop group {tacacs+ server-group} | EC004411 |
| aaa accounting dot1x | aaa accounting dot1x {default method-name} start-stop group {radius tacacs+ server-group} | EC004411 |
| aaa authentication login | authentication login {[local] [radius] [tacacs]} | EC004411 |
| aaa group server radius | [no] aaa group server {radius tacacs+} group-name | EC004411 |
| aaa group server tacacs+ | [no] aaa group server {radius tacacs+} group-name | EC004411 |
| address-family | address-family {ipv4 ipv6} | EC000499 |
| aggregate-address | [no] aggregate-address ip-address netmask [as-set] [summary only] | EC004411 |
| area default-cost | area area-id default-cost cost | EC004411 |
| area default-cost (OSPFv3) | area area-id default-cost cost | EC004411 |
| area nssa | [no] area area-id nssa [translator-role {candidate never always}] [no-redistribution] [no-summary] [default-information-originate {metric metric-value metric-type type-value}] | EC004411 |
| area nssa (OSPFv3) | [no] area area-id nssa [translator-role {candidate never always}] [no-redistribution] [no-summary] [default-information-originate {metric metric-value metric-type type-value}] | EC004411 |
| area nssa default-information-originate | [no] area area-id nssa [translator-role {candidate never always}] [no-redistribution] [no-summary] [default-information-originate {metric metric-value metric-type type-value}] | EC004411 |
| area nssa default-information-originate (OSPFv3) | [no] area area-id nssa [translator-role {candidate never always}] [no-redistribution] [no-summary] [default-information-originate {metric metric-value metric-type type-value}] | EC004411 |
| area nssa no-summary | [no] area area-id nssa [translator-role {candidate never always}] [no-redistribution] [no-summary] [default-information-originate {metric metric-value metric-type type-value}] | EC004411 |
| area range | [no] area area-id range ipv6-prefix/prefix-length {advertise not-advertise} | EC004411 |
| area range (OSPFv3) | [no] area area-id range ipv6-prefix/prefix-length {advertise not-advertise} | EC004411 |
| area stub | [no] area area-id stub [no-summary] | EC004411 |
| area stub (OSPFv3) | [no] area area-id stub [no-summary] | EC004411 |
| arp timeout | arp timeout seconds | EC004411 |
| bgp log-neighbor-changes | bgp log-neighbor-changes | EC004411 |
| boot system | boot system [unit:] {boot-rom config opcode}: filename | EC004411 |
| clear arp-cache | clear arp-cache | EC004411 |
| clear counters | clear counters interface | EC004411 |
| clear ip bgp | clear ip bgp { * as-number external peer-group group-name neighbor-address} [in [prefix-list] out soft [in out]] | EC004411 |
| clear ip ospf neighbor | clear ip ospf neighbor [neighbor-id] | EC000499 |
| clear ipv6 neighbors | clear ipv6 neighbors | EC004411 |
| clear mac-address-table dynamic | clear mac-address-table dynamic | EC004411 |
| clock set | clock set hh:mm:ss | EC000001 |
| clock timezone | clock timezone name hour hours minute minutes {before-utc after-utc} | EC004411 |
| default-information originate (OSPF) | [no] default-information originate | EC004411 |
| default-information originate (OSPFv3) | [no] default-information originate | EC004411 |
| default-metric (OSPF) | default-metric metric-value | EC004411 |
| default-metric (OSPFv3) | default-metric metric-value | EC004411 |
| distance bgp | distance bgp ebgp-distance ibgp-distance local-distance | EC004411 |
| dot1x pae authenticator | dot1x pae {supplicant authenticator} | EC000499 |
| dot1x port-control | dot1x port-control {auto force-authorized force-unauthorized} | EC004411 |
| dot1x reauthentication | [no] dot1x re-authentication | EC004411 |
| dot1x system-auth-control | [no] dot1x system-auth-control | EC004411 |
| dot1x timeout quiet-period | dot1x timeout quiet-period seconds | EC004411 |
| dot1x timeout reauth-period | dot1x timeout re-authperiod seconds | EC004411 |
| dot1x timeout tx-period | dot1x timeout tx-period seconds | EC004411 |
| interface ethernet | [no] interface interface interface ethernet unit/port-list unit - Unit identifier. (Range: 1-8) port-list - Physical port number or list of port numbers. Separate nonconsecutive port numbers with a comma and no spaces; or use a hyphen to designate a range of port numbers. (Range: 1-28/52) port-channel channel-id (Range: 1-16) | EC004411 |
| interface loopback | interface loopback id | EC000001 |
| interface port-channel | [no] interface interface interface ethernet unit/port-list unit - Unit identifier. (Range: 1-8) port-list - Physical port number or list of port numbers. Separate nonconsecutive port numbers with a comma and no spaces; or use a hyphen to designate a range of port numbers. (Range: 1-28/52) port-channel channel-id (Range: 1-16) | EC004411 |

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| interface vlan | [no] interface interface interface ethernet unit/port-list unit - Unit identifier. (Range: 1-8) port-list - Physical port number or list of port numbers. Separate nonconsecutive port numbers with a comma and no spaces; or use a hyphen to designate a range of port numbers. (Range: 1-28/52) port-channel channel-id (Range: 1-16) | EC004411 |
| ip access-group | ip access-group acl-name in [time-range time-range-name] [counter] | EC004411 |
| ip access-list | ip access-list name | EC000001 |
| ip address | ip address [ip-address netmask [secondary] [default-gateway ip-address] bootp dhcp] | EC004411 |
| ip dhcp snooping | [no] ip dhcp snooping | EC004411 |
| ip dhcp snooping information option | ip dhcp snooping information option [encode no-subtype] [remote-id [ip-address [encode {ascii hex}]] mac-address [encode {ascii hex}]] string string}} | EC004411 |
| ip dhcp snooping vlan | [no] ip dhcp snooping vlan vlan-id | EC004411 |
| ip domain lookup | [no] ip domain-list name | EC004411 |
| ip domain-name | ip domain-name name | EC004411 |
| ip helper-address | [no] ip helper-address ip-address | EC004411 |
| ip host | [no] ip host name address | EC004411 |
| ip igmp snooping | [no] ip igmp snooping [vlan vlan-id] | EC004411 |
| ip igmp snooping querier | [no] ip igmp snooping querier | EC004411 |
| ip igmp snooping vlan immediate-leave | ip igmp snooping vlan vlan-id immediate-leave [by-host-ip] | EC004411 |
| ip igmp snooping vlan mrouter | [no] ip igmp snooping vlan vlan-id mrouter interface | EC004411 |
| ip igmp snooping vlan static | ip igmp snooping vlan vlan-id query-resp-intvl interval | EC004411 |
| ip name-server | [no] ip name-server server-address1 [server-address2 ...server-address6] | EC004411 |
| ip ospf authentication | ip ospf [ip-address] authentication [message-digest null] | EC004411 |
| ip ospf cost | ip ospf [ip-address] cost cost | EC004411 |
| ip ospf dead-interval | ip ospf [ip-address] dead-interval seconds | EC004411 |
| ip ospf hello-interval | ip ospf [ip-address] hello-interval seconds | EC004411 |
| ip ospf network | ip ospf network [broadcast point-to-point] | EC000499 |
| ip ospf priority | ip ospf [ip-address] priority priority | EC004411 |
| ip ospf retransmit-interval | ip ospf [ip-address] retransmit-interval seconds | EC004411 |
| ip ospf transmit-delay | ip ospf [ip-address] transmit-delay seconds | EC004411 |
| ip route | ip route destination-ip netmask next-hop [distance] | EC004411 |
| ip routing | ip routing | EC004411 |
| ipv6 access-group | ipv6 access-group acl-name in [time-range time-range-name] [counter] | EC004411 |
| ipv6 access-list | ipv6 access-list name | EC000001 |
| ipv6 address | [no] ipv6 address ipv6-address[/prefix-length] | EC004411 |
| ipv6 dhcp relay destination | [no] ipv6 dhcp relay destination [ipv6-address multicast {all vlan vlan-id}] | EC004411 |
| ipv6 enable | [no] ipv6 enable | EC004411 |
| ipv6 host | [no] ipv6 host name ipv6-address | EC004411 |
| ipv6 nd managed-config-flag | [no] ipv6 nd managed-config-flag | EC004411 |
| ipv6 nd ns-interval | ipv6 nd ns-interval milliseconds | EC004411 |
| ipv6 nd other-config-flag | [no] ipv6 nd other-config-flag | EC004411 |
| ipv6 nd prefix | ipv6 nd prefix ipv6-address/prefix-length {default [valid-lifetime preferred-lifetime [no-autoconfig off-link]]} | EC004411 |
| ipv6 nd ra interval | ipv6 nd ra interval minimum-interval [maximum-interval] | EC004411 |
| ipv6 nd ra lifetime | ipv6 nd ra lifetime lifetime | EC004411 |
| ipv6 nd reachable-time | ipv6 nd reachable-time milliseconds | EC004411 |
| ipv6 nd router-preference | ipv6 nd router-preference {low medium high} | EC000499 |
| ipv6 ospf area | ipv6 ospf area 0-4294967295 | EC000499 |
| ipv6 ospf cost | ipv6 ospf cost cost [instance-id instance-id] | EC004411 |
| ipv6 ospf dead-interval | ipv6 ospf dead-interval seconds [instance-id instance-id] | EC004411 |
| ipv6 ospf hello-interval | ipv6 ospf hello-interval seconds [instance-id instance-id] | EC004411 |
| ipv6 ospf network | ipv6 ospf network [broadcast point-to-point] | EC000499 |
| ipv6 ospf priority | ipv6 ospf priority priority [instance-id instance-id] | EC004411 |
| ipv6 ospf retransmit-interval | ipv6 ospf retransmit-interval seconds [instance-id instance-id] | EC004411 |
| ipv6 ospf transmit-delay | ipv6 ospf transmit-delay seconds [instance-id instance-id] | EC004411 |
| ipv6 route | [no] ipv6 route destination-ipv6-address/prefix-length {gateway-address [distance] link-local-address%zone-id [distance]} | EC004411 |
| ipv6 router ospf | [no] router ipv6 ospf [tag process-name] | EC004411 |
| ipv6 unicast-routing | ipv6 unicast-routing | EC000499 |
| lacp port-priority | lacp {actor partner} port-priority priority | EC004411 |
| lacp system-priority | lacp {actor partner} system-priority priority | EC004411 |
| lldp receive | lldp receive | EC000001 |
| lldp transmit | lldp transmit | EC000001 |
| log-adjacency-changes | log-adjacency-changes [detail] | EC000499 |
| logging host | logging host host-ip-address [port udp-port] | EC004411 |
| mac access-group | mac access-group acl-name in [time-range time-range-name] [counter] | EC004411 |
| mac-address-table aging-time | mac-address-table aging-time seconds | EC004411 |
| mac-address-table static | mac-address-table static mac-address interface interface vlan vlan-id [action] | EC004411 |
| maximum-paths | maximum-paths path-count | EC004411 |

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| maximum-paths (OSPFv3) | maximum-paths path-count | EC004411 |
| neighbor activate | [no] neighbor {ip-address group-name} activate | EC004411 |
| neighbor default-originate | neighbor {ip-address group-name} default-originate [route-map map-name] | EC004411 |
| neighbor description | neighbor {ip-address group-name} description description | EC004411 |
| neighbor next-hop-self | [no] neighbor {ip-address group-name} next-hop-self | EC004411 |
| neighbor password | neighbor {ip-address group-name} password | EC004411 |
| neighbor remote-as | neighbor {ip-address group-name} remote-as as-number | EC004411 |
| neighbor route-map | neighbor {ip-address group-name} route-map map-name {in out} | EC004411 |
| neighbor send-community | [no] neighbor {ip-address group-name} send-community {both extended standard} | EC004411 |
| neighbor shutdown | [no] neighbor {ip-address group-name} shutdown | EC004411 |
| neighbor timers | [no] neighbor {ip-address group-name} timers keepalive-time hold-time | EC004411 |
| neighbor update-source | [no] neighbor {ip-address group-name} update-source interface vlan vlan-id | EC004411 |
| network area | [no] network ip-address netmask area area-id | EC004411 |
| no snmp-server | [no] snmp-server | EC004411 |
| ntp authenticate | [no] ntp authenticate | EC004411 |
| ntp authentication-key | ntp authentication-key number md5 key | EC004411 |
| ntp server | ntp server ip-address [key key-number] | EC004411 |
| passive-interface | [no] passive-interface vlan vlan-id [no] passive-interface vlan vlan-id [ip-address] [no] passive-interface vlan vlan-id [ipv6-address] | EC004411 |
| passive-interface (OSPFv3) | [no] passive-interface vlan vlan-id [no] passive-interface vlan vlan-id [ip-address] [no] passive-interface vlan vlan-id [ipv6-address] | EC004411 |
| passive-interface default | passive-interface default | EC000499 |
| port-channel load-balance | port channel load-balance {dst-ip dst-mac src-dst-ip src-dst-mac src-ip src-mac} | EC004411 |
| port-channel min-links | port-channel min-links 1-8 | EC000001 |
| priority-flow-control mode | priority-flow-control mode {on off} | EC000001 |
| radius-server host | [no] radius-server index host host-ip-address [acct-port acct-port] [authport authport] [key key] [retransmit retransmit] [timeout timeout] | EC004411 |
| radius-server key | radius-server key key-string | EC004411 |
| radius-server retransmit | radius-server retransmit number-of-retries | EC004411 |
| radius-server timeout | radius-server timeout number-of-seconds | EC004411 |
| route-map | [no] route-map map-name {deny permit} sequence-number | EC004411 |
| router bgp | [no] router bgp as-number | EC004411 |
| router ospf | [no] router ospf [process-id] | EC004411 |
| router-id | router-id ip-address | EC004411 |
| router-id (OSPFv3) | router-id ip-address | EC004411 |
| show arp | show arp | EC004411 |
| show clock | show clock | EC000001 |
| show dot1q-tunnel | show dot1q-tunnel [interface interface [service svid] service [svid]] | EC004411 |
| show dot1x | show dot1x [statistics] [interface interface] statistics - Displays dot1x status for each port. interface ethernet unit/port unit - Unit identifier. (Range: 1-8) port - Port number. (Range: 1-24/53) | EC004411 |
| show dot1x statistics | show dot1x [statistics] [interface interface] statistics - Displays dot1x status for each port. interface ethernet unit/port unit - Unit identifier. (Range: 1-8) port - Port number. (Range: 1-24/53) | EC004411 |
| show flowcontrol ** | show flowcontrol [slot/port] | EC000499 |
| show hosts | show hosts | EC004411 |
| show interfaces status | show interfaces status [interface] | EC004411 |
| show interfaces switchport | show interfaces switchport [interface] | EC004411 |
| show interfaces transceiver | show interfaces transceiver [interface] | EC004411 |
| show ip access-lists | show ip access-lists [accesslistnumber name] | EC000001 |
| show ip bgp | show ip bgp ip-address [netmask [longer-prefixes]] | EC004411 |
| show ip bgp community | show ip bgp community [[[AA:NN] [internet] [local-as] [no-advertise] [no-export] [exact-match]]] | EC004411 |
| show ip bgp neighbors | show ip bgp neighbors [ip-address [advertised-routes received-prefix-filter received-routes routes]] | EC004411 |
| show ip bgp summary | show ip bgp summary | EC004411 |
| show ip dhcp snooping | show ip dhcp snooping | EC004411 |
| show ip helper-address | [no] ip helper-address ip-address show ip helper | EC004411 |
| show ip igmp snooping | show ip igmp snooping [vlan vlan-id] | EC004411 |
| show ip igmp snooping mrouter | show ip igmp snooping mrouter [vlan vlan-id] | EC004411 |
| show ip interface | show ip interface | EC004411 |
| show ip interface brief | show ip interface brief | EC000499 |
| show ip ospf | show ip ospf [process-id] | EC004411 |
| show ip ospf database database-summary | show ip ospf database database-summary | EC000499 |
| show ip ospf interface | show ip ospf interface [vlan vlan-id] | EC004411 |
| show ip ospf neighbor | show ip ospf [process-id] neighbor | EC004411 |

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| show ip route | show ip route [bgp connected database ospf rip static summary] | EC004411 |
| show ip route summary | show ip route summary | EC004411 |
| show ipv6 access-list | show ipv6 access-list {standard extended} [acl-name] | EC004411 |
| show ipv6 interface | show ipv6 interface [brief [vlan vlan-id [ipv6-prefix/prefix-length]]] | EC004411 |
| show ipv6 neighbors | show ipv6 neighbors [vlan vlan-id ipv6-address] | EC004411 |
| show ipv6 ospf | show ipv6 ospf | EC004411 |
| show ipv6 ospf interface | show ipv6 ospf interface [vlan vlan-id] | EC004411 |
| show ipv6 ospf neighbor | show ipv6 ospf [tag process-id] neighbor | EC004411 |
| show ipv6 route | show ipv6 route [ipv6-address[/prefix-length] database interface [vlan vlan-id] local ospf static] | EC004411 |
| show ipv6 route summary | show ipv6 route [(ipv6-address [protocol] {{ipv6-prefix/ipv6-prefix-length slot/port vlan 1-4093} [protocol] protocol summary} [all] all)] | EC000499 |
| show lacp counters | show lacp [port-channel] {counters internal neighbors sys-id} | EC004411 |
| show lldp | show lldp | EC000001 |
| show mac access-lists | show mac access-list [acl-name] | EC004411 |
| show mac-address-table | show mac-address-table [address mac-address [mask]] [interface interface] [vlan vlan-id] [sort {address vlan interface}] | EC004411 |
| show mac-address-table aging time | show mac-address-table aging-time | EC004411 |
| show mac-address-table count | show mac-address-table count [interface interface] | EC004411 |
| show monitor session | show monitor session session-id | EC000001 |
| show policy-map interface | show policy-map interface interface input | EC004411 |
| show port-security | show port security [interface interface] | EC004411 |
| show port-security interface | show port security [interface interface] | EC004411 |
| show privilege | show privilege [command] | EC004411 |
| show qos maps | show qos map cos-dscp interface interface | EC004411 |
| show reload | show reload | EC004411 |
| show snmp | show snmp | EC004411 |
| show snmp engineID | show snmp engine-id | EC004411 |
| show snmp group | show snmp group | EC004411 |
| show snmp source-interface | show snmp source-interface | EC000001 |
| show snmp user | show snmp user | EC004411 |
| show snmp view | show snmp view | EC004411 |
| show spanning-tree | show spanning-tree [interface mst instance-id brief stp-enabled-only] | EC004411 |
| show spanning-tree mst configuration | show spanning-tree mst configuration | EC004411 |
| show storm-control | show storm-control [all slot/port] | EC000001 |
| show users | show users | EC004411 |
| show version | show version | EC004411 |
| show vlan | show vlan [id vlan-id name vlan-name] | EC004411 |
| show vlan internal usage | show vlan internal usage | EC000001 |
| snmp-server community | snmp-server community string {ro rw} | EC004411 |
| snmp-server contact | snmp-server contact string | EC004411 |
| snmp-server enable traps | [no] snmp-server enable traps {authentication link-up-down ethernet cfm mac-notification [interval seconds]} | EC004411 |
| snmp-server engineID local | snmp-server engine-id {local remote {ip-address}} engineid-string | EC004411 |
| snmp-server engineID remote | snmp-server engine-id {local remote {ip-address}} engineid-string | EC004411 |
| snmp-server group | snmp-server group groupname {v1 v2c v3 {auth noauth priv}} [read readview] [write writeview] [notify notifyview] | EC004411 |
| snmp-server host | snmp-server host host-addr [inform {retry retries timeout seconds}] community-string [version {1 2c 3 {auth noauth priv} [udp-port port]}] | EC004411 |
| snmp-server location | snmp-server location text | EC004411 |
| snmp-server user | snmp-server user username groupname {v1 v2c v3 [encrypted] [auth {md5 sha} auth-password [priv des56 priv-password]]} | EC004411 |
| snmp-server view | snmp-server view view-name oid-tree {included excluded} | EC004411 |
| spanning-tree bpdupfilter | [no] spanning-tree bpdup-filter | EC004411 |
| spanning-tree bpduguard | spanning-tree bpduguard [auto-recovery [interval interval]] | EC004411 |
| spanning-tree cost | spanning-tree cost cost | EC004411 |
| spanning-tree guard | spanning-tree guard {none root loop} | EC000001 |
| spanning-tree link-type | spanning-tree link-type {auto point-to-point shared} | EC004411 |
| spanning-tree mode | spanning-tree mode {stp rstp mstp} | EC004411 |
| spanning-tree mst configuration | spanning-tree mst configuration | EC004411 |
| spanning-tree port-priority | spanning-tree port-priority | EC004411 |
| switchport mode | switchport mode {access hybrid trunk} | EC004411 |
| tacacs-server host | tacacs-server index host host-ip-address [key key] [port port-number] [retransmit retransmit] [timeout timeout] | EC004411 |
| tacacs-server key | tacacs-server key key-string | EC004411 |
| tacacs-server timeout | tacacs-server timeout number-of-seconds | EC004411 |
| terminal length | terminal {escape-character {ASCII-number character} history [size size] length length terminal-type {ansi-bbs vt-100 vt-102} width width} | EC004411 |
| timers bgp | timers bgp keepalive-time hold-time | EC004411 |
| vlan internal allocation policy | vlan internal allocation {base vlan-id policy ascending policy decending} | EC000499 |

** Based on Exhibit Copying-2 to the Almeroth Opening Report, this command abstraction is not used by Cisco, but it is what Cisco and Prof. Almeroth accuses Arista EOS of using.

Total of 224 command abstractions listed above.